Abstract

A System and a Method of initializing and using that system are described in various embodiments all suitable for use remotely monitoring gas escapes on oil or gas well-sites, particularly as early warning technologies for use in preventing injury to workers or populations adjacent those well-sites. The system efficiently uses the Internet to securely transmit pre-processed data off-site for a range of different uses either directly to well-site operators or via a server for value-added handling of and convenient access by operators and others to information based on the data. The system conserves both IP addresses and communications bandwidth without compromising access to detailed data respecting well-site status. The novel system includes means for using multiple modes of long-distance communications technology that can be configured manually or that conveniently auto-senses and auto-selects the appropriate communications mode to use for transmitting data off-site via the Internet according to the location of installation of the system and whether or not it has entered an alarm condition.